

"Express Mail" Label No. EL 951611709US Date of Deposit: February 25, 2002 Attorney Docket No.: 014058-008591US

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Address" service under 37 CFR 1.10 on the date indicated above and is addressed to.

Assistant Commissioner for Patents

Washington, D.C. 20231

By:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Reed et al.

Application No.: Not yet assigned

Filed: Herewith

For: COMPOUNDS AND METHODS FOR IMMUNOTHERAPY AND DIAGNOSIS OF TUBERCULOSIS Examiner:

Not yet assigned

Art Unit:

Not yet assigned

PRELIMINARY AMENDMENT

Box Patent Application Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

Please amend the above-identified application as follows.

# IN THE SPECIFICATION

On page 1, lines 6-17, please amend the application as follows:

This application is a continuation of U.S. Application No. 09/072,967, filed May 5, 1998, which is a continuation-in-part of U.S. Application No. 09/025,197, filed February 18, 1998, now abandoned; which is a continuation-in-part of U.S. Application No. 08/942,578, filed October 1, 1997, now abandoned; which is a continuation-in-part of U.S. Application No. 08/818,112, filed March 13, 1997, now U.S. Patent No. 6,290,969; which is a

continuation-in-part of U.S. Application No. 08/730,510, filed October 11, 1996, now abandoned; which claims priority from PCT Application No. PCT/US 96/14674, filed August 30, 1996; and is a continuation-in-part of U.S. Application No. 08/680,574, filed July 12, 1996, now abandoned; which is a continuation-in-part of U.S. Application No. 08/659,683, filed June 5, 1996, now abandoned; which is a continuation-in-part of U.S. Application No. 08/620,874, filed March 22, 1996, now abandoned; which is a continuation-in-part of U.S. Application No. 08/533,634, filed September 22, 1995, 1995, now abandoned; which is a continuation-in-part of U.S. Application No. 08/523,436, filed September 1, 1995, now abandoned, each of which is herein incorporated by reference in their entirety.

### IN THE CLAIMS

Please cancel claims 1-37 without prejudice to subsequent revival.

Please add new claims 38-51 as follows. Support for the new claims can be found in the claims as originally filed in parent patent application 09/072,967.

- 38. (new) An isolated nucleic acid encoding an immunogenic portion of a soluble *M. tuberculosis* antigen, wherein the nucleic acid hybridizes under moderately stringent conditions to a nucleotide sequence selected from the group consisting of SEQ ID NO:26-51, 138, 139, 163-183, 201, 240, 242-247, 253-256, 295-298, 309, 316, 318-320, 322, 324, 328, 329, 333, 335, 337, 339, and 341, or a complement thereof.
  - 39. (new) An expression vector comprising a nucleic acid of claim 38.
  - 40. (new) A host cell comprising an expression vector of claim 39.
- 41. (new) The host cell of claim 40, wherein the cell is selected from the group consisting of *E. coli*, yeast, and mammalian cells.
- 42. (new) A composition comprising a nucleic acid of claim 38 and a physiologically acceptable carrier.

- 43. (new) An isolated polypeptide encoded by a nucleic acid of claim 38.
- 44. A fusion protein comprising a polypeptide according to claim 43.
- 45. (new) A composition comprising a polypeptide of claim 43 or a fusion protein of claim 44 and a physiologically acceptable carrier.
- 46. (new) The composition of claim 45, further comprising a non-specific immune response enhancer.
- 47. (new) The composition of claim 46, wherein the non-specific immune response enhancer is an adjuvant.
- 48. (new) A method of inducing protective immunity in a patient, the method comprising the steps of administering to the subject a composition according to claim 45.
- 49. (new) A vaccine comprising a polypeptide of claim 43 or a fusion protein of claim 44; and a physiologically acceptable carrier.
- 50. (new) A method for detecting tuberculosis in a subject, said method comprising the steps of:
  - (a) contacting dermal cells of a patient with a polypeptide of claim 43; and
- (b) detecting an immune response on the patient's skin and therefrom detecting tuberculosis in the patient.
  - 51. (new) A diagnostic kit comprising:
  - (a) a polypeptide of claim 43; and

(b) apparatus sufficient to contact the polypeptide with the dermal cells of a patient.

## **CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,

Annette S. Parent Reg. No. 42,058

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, 8<sup>th</sup> Floor San Francisco, California 94111-3834

Tel: (415) 576-0200 Fax: (415) 576-0300

# APPENDIX A VERSION WITH MARKINGS TO SHOW CHANGE

### IN THE SPECIFICATION

On page 1, lines 6-17, please amend the application as follows:

This application is a continuation of U.S. Application No. 09/072,967, filed May 5, 1998, which is a continuation-in-part of U.S. Application No. 09/025,197, filed February 18, 1998, now abandoned; which is a continuation-in-part of U.S. Application No. 08/942,578, filed October 1, 1997, now abandoned; which is a continuation-in-part of U.S. Application No. 08/818,112, filed March 13, 1997, now U.S. Patent No. 6,290,969; which is a continuation-in-part of U.S. Application No. 08/730,510, filed October 11, 1996, now abandoned; which claims priority from PCT Application No. PCT/US 96/14674, filed August 30, 1996; and is a continuation-in-part of U.S. Application No. 08/680,574, filed July 12, 1996, now abandoned; which is a continuation-in-part of U.S. Application No. 08/659,683, filed June 5, 1996, now abandoned; which is a continuation-in-part of U.S. Application No. 08/620,874, filed March 22, 1996, now abandoned; which is a continuation-in-part of U.S. Application No. 08/533,634, filed September 22, 1995, 1995, now abandoned; which is a continuation-in-part of U.S. Application No. 08/523,436, filed September 1, 1995, now abandoned, each of which is herein incorporated by reference in their entirety.

SF 1314987 v1

"Express Mail" Label No. EL 951611709 Date of Deposit February 25, 2002

Attorney Docket No.: 014058-008591US

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Address" service under 37 CFR 1 10 on the date indicated above and is addressed to:

Assistant Commissioner for Patents

Washington, D.C. 20231

Bv:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Examiner:

Not yet assigned

Reed et al.

Art Unit:

Not yet assigned

Application No.: Not yet assigned

Filed: Herewith

LETTER TO OFFICIAL DRAFTSPERSON

For: COMPOUNDS AND METHODS FOR IMMUNOTHERAPY AND DIAGNOSIS OF TUBERCULOSIS

Box Patent Application Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

Attached to be made of record in this application are nineteen (19) sheets of formal drawings, as submitted on August 23, 2001 in parent case Serial No. 09/072,967.

Respectfully submitted,

Annette S. Parent Reg. No. 42,058

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, 8<sup>th</sup> Floor

San Francisco, California 94111-3834

Tel: (415) 576-0200 Fax: (415) 576-0300

SF 1315507 v1